Two PhD Scholarships in Signal Processing and Communications Engineering Available

The University of A Coruña and the University of Cantabria, Spain

General Description

The Universities of A Coruña and Cantabria, Spain, offer two full-time PhD scholarships to conduct research in the domains of Signal Processing and Communications. Both scholarships are linked to the research project "Coding and Signal Processing for Emerging Wireless Communication and Sensor Networks (CARMEN)" and will be funded by the 2017 edition of the predoctoral contracts program sponsored by the Spanish Government (former FPI grants). The duration of the scholarship is up to four years, and the yearly gross salary is approximately 16.500 €.

About the CARMEN Project

The PhD candidates will be working full-time on topics within the scope of CARMEN, a research project sponsored by the Spanish Government to be developed by a consortium of four Spanish academic research groups belonging to the Universities of A Coruña, Cantabria, Navarra, and the Technical University of Catalunya. CARMEN addresses two major trends in current wireless networks: radio interfaces with unprecedented high data rates and Wireless Sensor Networks (WSN). CARMEN aims at developing advanced coding techniques (joint source channel coding, polar coding, correlated information, network coding) and signal processing techniques (unconventional MIMO transceiver architectures, improper signalling for interference-limited scenarios, multiuser architectures for non-coherent transmissions, and distributed signal and information processing over networks and graphs) for emerging wireless communication and sensor networks. CARMEN will also carry out experimental evaluation of coding and signal processing techniques by means of over-the-air (OTA) transmissions and simulations.

Duration and salary

- Four years, starting from the resolution of the 2017 edition of the Spanish predoctoral contracts program (expected around June 2017). Immediate incorporation is also possible.
- The yearly gross salary is approximately 16.500 euros
- Additional funding of short stays (up to three months) in R&D centres of the consortium and/or outside Spain
- Coverage of enrollment costs in doctoral studies.

Requirements

Candidates who wish to apply should satisfy the following criteria:

- Master-equivalent degree in Telecommunications engineering, Computer Engineering, Electrical Engineering, or related areas,
- Strong academic credentials,
- Written and spoken English proficiency,
- Join the PhD Program in Information and Communication Technology for Mobile Networks,
- Strong knowledge in signal processing, information theory and communications engineering.

About the Host Institutions

The University of A Coruña is a public university founded in 1989 and located in A Coruña, a modern, dynamic and innovative city in the northwest of Spain with 500,000 inhabitants (metropolitan area). The PhD student will be a member of the Electronics Technology and

Communications Group, a research group with a long standing experience in Multiple-Input Multiple-Output (MIMO), transceiver design, analog joint source channel coding and experimental evaluation using wireless network testbeds.

The University of Cantabria is a public university founded in 1972 and located in Santander, a beautiful seaside city in the North of Spain. The UC has approximately 12,500 students and more than 1200 faculty and research staff. The UC was recognized in 2009 as one of the top nine international campuses of excellence of Spanish universities. The PhD student will be a member of the Advanced Signal Processing Group, a research group with strong expertise on multiuser MIMO systems.

Application process

Interested candidates are encouraged to contact via email

- Prof. **Luis Castedo** (luis@udc.es). The University of A Coruña.
- Prof. **Ignacio Santamaría** (i.santamaria@unican.es). The University of Cantabria.

The positions will remain open until filled.